T O U R I S M

NATURAL RESOURCE BASED TOURISM IN NORTHWESTERN BRITISH COLUMBIA

Summary Report

ECONOMIC & REGIONAL DEVELOPMENT AGREEMENT

Canada

BC

NATURAL RESOURCE BASED TOURISM IN NORTHWESTERN BRITISH COLUMBIA

Summary Report

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Industry, Science and Technology Canada
Industrie, Sciences et Technologie Canada

British Columbia
Ministry of Development, Trade and Tourism

For additional copies of this publication and/or further information about the Canada - British Columbia Tourism Industry Development Subsidiary Agreement, contact:

Ministry of Development, Trade and Tourism
Research and Information Management
#300 - 1803 Douglas Street
Victoria, B.C.
V8T 5C3
Telephone: (604) 356-9932

or

Industry, Science and Technology Canada
P.O. Box 11610
900 - 650 West Georgia Street
Vancouver, B.C.
V6B 5H8
Telephone: (604) 666 - 0434

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1.0 INTRODUCTION

While tourism has traditionally been viewed as a market-driven service industry, it has recently been recognized that it must also be regarded as a natural resource sector. Government and industry are now realizing that the tourism resource base must not be degraded.

The first step in tourism resource management requires inventorying and mapping the land and water base. In the past few years studies undertaken for the B.C. government have begun to identify those elements required for the tourism resource inventory process (e.g. preliminary mapping 1:2,000,000 and 1:600,000 scale of the provincial tourism resource). The requirement now is for a planning tool which provides information both on the geographic distribution and relative quality of the tourism resource.

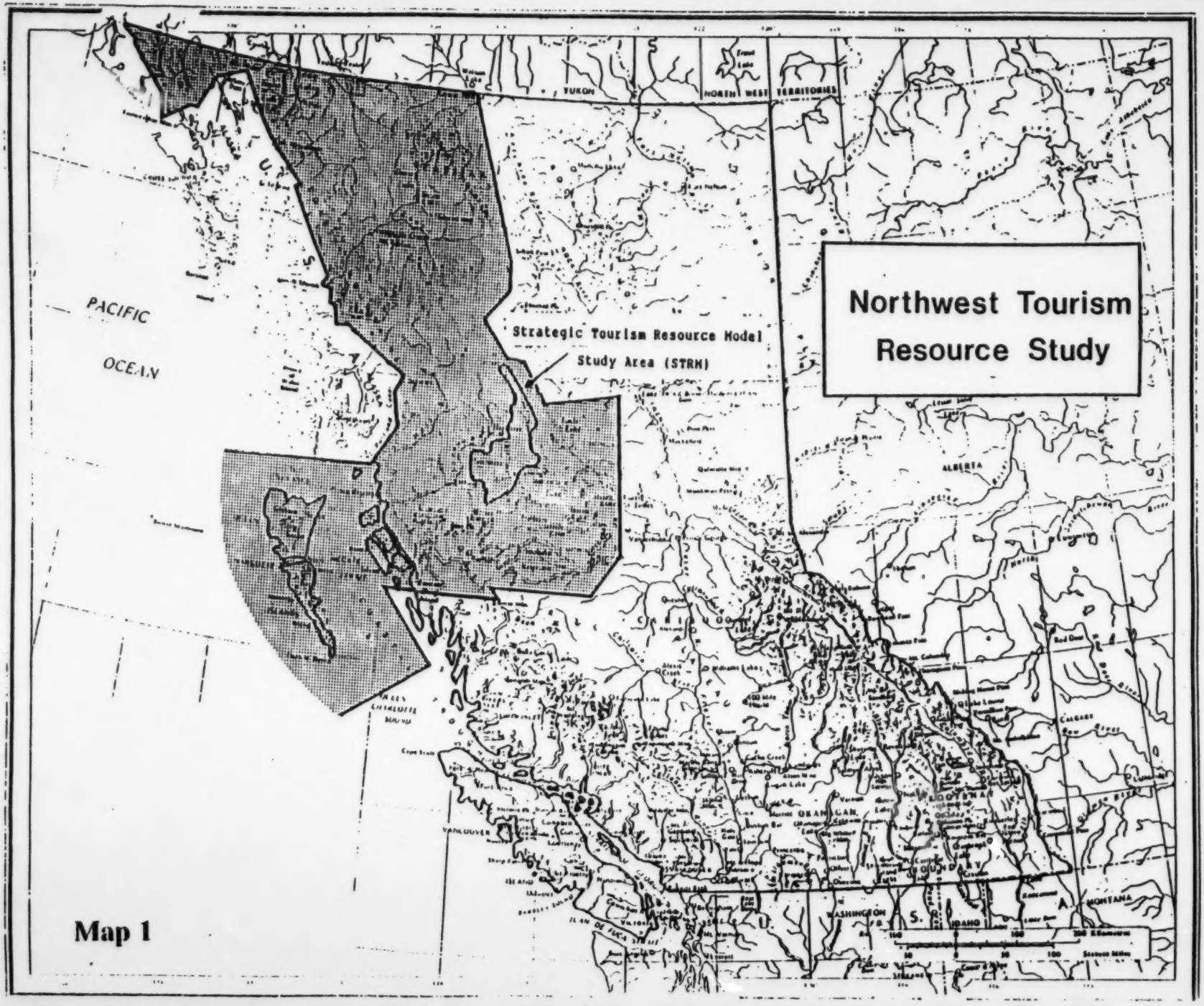
In view of this, the Northwest Guides and Outfitters Association along with the B.C. Ministry of Development, Trade and Tourism sponsored this study entitled Resource Based Tourism in Northwest British Columbia. This study provides a comprehensive insight into the nature and economic significance of resource-based tourism in northwestern B.C. and a strategic tourism resource model (STRM) which provides detailed inventory and resource planning information for district-level land-use exercises.

The objectives of the study are to: (a) identify the extent and distribution of resource based tourism in northwestern B.C., (b) provide an economic profile of the significance of the region's resource-based tourism industry, (c) develop a strategic planning model based on a rigorous, reproducible methodology to inventory and analyze the tourism resource, and, (d) demonstrate this strategic tourism resource model for a test site surrounding Smithers.

A steering committee comprised of key representative from various agencies and government ministries directed this project.

1.1 STUDY AREA

This Northwest Tourism Resource project incorporates the North Coast and Nechako Economic Regions (see Map 1). This region was chosen as it corresponds well with the boundaries used by the Ministry of Development, Trade and Tourism. It also includes the great majority of the North by Northwest Tourism region. Since the portion excluded contains only a small percentage of the region's natural resource-based tourism product, the relevance of tourism statistical data is not significantly affected.


Northwest Tourism
Resource Study
Strategic Tourism Resource Model
Study Area (STRM)
PACIFIC
OCEAN
YUKON
NORTH WEST TERRITORIES
ALBERTA
OKANAGAN
VANCOUVER
WASHINGTON
IDAHO
MONTANA
Map 1

Development of the strategic resource inventory methodology (STRM) has been undertaken for a portion of northwestern B.C. in the area surrounding Smithers. The area chosen for this more intensive pilot study reaches from Babine Lake in the east, to the Copper River in the west, and from Quick in the south to the headwaters of the Nilkitkwa River in the north - a total of 660,000 ha.

1.2 STUDY PROCESS

An initial task involved the updating of the 1:600,000 tourism resource inventory mapping undertaken by the Ministry of Tourism in 1987. This update incorporated the Tourism Zonation System's Front/Mid/Back and High/Medium/Low resource classifications to assist in planning and priorization.

A mylar working set of this updated mapping was provided to the Research and Information Management Branch, B.C. Ministry of Development, Trade and Tourism in Victoria.

Building upon this mapping analysis, a description of the region's tourism resource patterns was prepared, based on an assessment of biophysical, human, and natural resource factors (Chapter 2.0). Following this, a regional overview on the economic significance and nature of resource-based tourism in northwestern B.C. was undertaken (Chapters 3.0 & 4.0). Finally, a methodology for inventorying and analyzing the tourism resource was developed and applied on a pilot basis to the Smithers hinterland (Chapters 5.0 & 6.0).

2.0 REGIONAL TOURISM RESOURCE DESCRIPTION

The geographic characteristics of northwestern British Columbia's tourism resource are the product of three main factors: biophysical environment factors, human factors and natural resource factors.

2.1 BIOPHYSICAL FACTORS

The biophysical environment of northwestern B.C. can be differentiated into three sets of attributes: landforms, climate and vegetation. The general patterns associated with each of these factors are summarized below.

Landforms

The extensive mountain ranges that dominate the region are a focal point for both frontcountry automobile touring, and backcountry adventure travel. Such a terrain encourages a range of "gravity sports," i.e. downhill skiing.

The diversity of the coastline provides high calibre marine opportunities, i.e. cruising, kayaking. The region's interior offers exceptional freshwater fishing and hunting opportunities.

However, facilities are few in number and less developed than in more southerly parts of B.C. Its comparative remoteness also increases the cost and time required of visitors to reach the region.

Climate

Due to its more northerly location, the climate of the region is comparatively cool and features a short summer (June to early September). Such heavy seasonal skewing results in a short peak use period and a comparatively longer time when facilities are under utilized or closed. To offset this disincentive to major private sector investment, emphasis must be placed on the development of tourism operations whose facilities can be used by residents in the off-season, or on which have the opportunity for multi-season use.

Vegetation

From a tourism standpoint, the following composite zones (which are a combination of various biogeoclimatic zones/subzones) are used: glacier, alpine, parkland or subalpine, and general forest.

Glaciers: Glacier areas can provide terrain essential for heli-skiing. As well they can be important scenic features.

Alpine: Alpine vegetation areas are important for backcountry tourism use, i.e. hunting, wildlife viewing, backpacking and trail riding.

Subalpine: Subalpine parklands are extremely attractive, and important for activities such as camping, ski-touring, snow-cat skiing, downhill skiing and backpacking.

General Forest: Extensive forest vistas offer tourists a sense of environmental quality (i.e. old growth forest). Its protection is of strong importance to tourism.

2.2 HUMAN FACTORS

At the regional scale, the two main human-created factors that define the tourism resource are land status and access.

Land Status

Crown lands, private lands, native land claims, parks and recreation areas, and resource extraction tenures are all land status issues which impact tourism resources and affect how they can be utilized.

The recent growth in tourism, for instance, has led to a rapidly increasing demand for Crown Land permits. Yet, the lack of tourism inventory has made it difficult to identify viable and environmentally suitable new sites in order to approve such permits.

Access

The access elements that affect the tourism resource include: airports, highways, resource roads, trails, railways and marine cruise routes.

Air travel, for instance, is an essential element of modern tourism in extensive and comparatively isolated regions like northwestern B.C. Distant markets can only access them if a good network of regional airports, smaller strips and landing sites exist. Therefore, the opening or closure of a regional airport or changes in the air service can enhance or degrade tourism potential. Adventure tourism operations must be located within a certain maximum drive time of a regional airport for their businesses to be viable.

The majority (87%) of visitors to northwestern B.C. travel by road with many of these vacations focusing around long distance touring. The region's tourism sector is heavily dependent on the fact that it is on the road to Alaska and also on the Inside Passage/Highway 16 loop.

Major resource roads are also used by touring travellers. However, this access has the potential to seriously degrade the integrity of wilderness tourism operations such as backcountry hunting.

2.3 NATURAL RESOURCE FACTORS

Natural resource attributes can both enhance and diminish tourism opportunities. In northwestern B.C. these are: forestry, mining, fish, wildlife, visual resources, local recreational use and cultural heritage.

Commercial **forestry** has a major effect on the tourism resource in many parts of the region, particularly in the south and on the Queen Charlotte Islands. Clear-cutting, while economically preferable from the forester's perspective, results in visual disturbance which significantly diminishes tourist satisfaction. Other concerns include forestry's effects on the sports fishery, and wildlife viewing.

While **mining** operations tend to be localized and of lesser impact to tourism, the exploration practices historically associated with this industry can cause serious impacts and affect the viability of operations such as guide outfitting and wilderness rafting businesses.

Fisheries are important to commercial, native and sports fishermen. Conflicts between commercial and sports fishing are increasing in the northwest. Native use affects the sports fishery as well. Currently a portion of the overall quota is allocated for native subsistence fishing. However, the present situation could change drastically depending on the outcome of native land claims.

The opportunity to watch or hunt a wide diversity of **wildlife** is one of the premier tourism attractions of the region. The extensive areas of wilderness that remain intact in northwestern B.C. maintain this outstanding resource. Development activities such as logging and mining result in habitat change which can impact negatively on numbers and range of species.

The areas where **visual resources** most affect tourism is in the more intensely used frontcountry: along highways, surrounding communities and destination resorts. However, visual quality is also important for midcountry viewscape areas (fish and guide outfitter lodges) and in the backcountry (high value quality wilderness).

Local non-commercial recreation can either be compatible or conflict with tourism depending on the particular activity. The areas where the potential for conflicts with non-commercial recreationalists are greatest will be on sites nearest larger communities.

In the northwest, **cultural heritage** values which contribute to the tourism resource include native village remains as well as Euro-Asian historical sites.

Due to the present lack of tourism resource information, the tourism industry is strongly disadvantaged when trying to safeguard its environmental values from natural resource impacts.

2.4 TOURISM ZONATION SYSTEM: Front/Mid/Backcountry

The Tourism Zonation System (TZS) is a planning tool used to differentiate natural resource-based tourism product into **urban**, **frontcountry**, **midcountry** or **backcountry** zones according to the degree of natural environment modification, the type of tourism experience, the method of transport, the intensity of use and the scale of facilities.

The Tourism Zonation System enables tourism facility siting, product development and marketing to be undertaken in an environmentally appropriate and economically viable fashion. Examples of each zone and their uses are found in Table 1.

Table 1: TOURISM ZONATION SYSTEM

ZONE	LOCATION	EXAMPLES OF USES
Urban	Prince George	variety of tourism services
Front	highway routes	touring daytrip rafting daytrip ski touring guest ranches, etc.
Mid	Lakes district	heli-skiing mountain biking motor launch cruises multiday heli-hiking,etc.
Back	Tweedsmuir Park	multiday river rafting canoe tripping nature treks mountaineering trips

2.5 PRIORIZING THE NORTHWEST TOURISM RESOURCE

The various biophysical, human and composite factors together determine the pattern and quality of the tourism resource in northwestern B.C. The mapping

undertaken for this project identifies in overview fashion those portions of the region that are of **high**, **moderate** and **low** significance to the tourism industry.

High significance tourism lands are of such a calibre as to be internationally and nationally significant. These sites should receive priority attention from government and industry to ensure that they are carefully planned, managed and developed.

Moderate significance tourism resource areas possess natural environment features that while often not distinctive enough by themselves to attract non-resident travellers, will draw B.C. residents. Often a less intensive review of inventory and integrated resource management planning is appropriate.

Low significance sites lack the quality to attract tourists from beyond the local area. As a result, they require the least planning and management effort.

3.0 REGIONAL TOURISM ECONOMIC PROFILE

Tourism statistics in British Columbia are grouped into resident and non-resident components. From information contained in the Residents '89 and Visitors '89 study, the relative strength of northwestern B.C.'s tourism economy is apparent. In 1989, the region accounted for 5.4% of the overall B.C. resident tourist flow and 4% of the non-resident flow. Given that northwestern B.C. accounts for 3.4% of the provincial population base, the industry here is performing ahead of the B.C. average on a per capita basis.

3.1 RESIDENT TRAVEL PATTERNS

Of the 1,230,000 person trips made by B.C. residents to the North by Northwest Tourist Region in 1989, 33% (405,900) were undertaken by local residents and 67% (824,100) by British Columbians coming from elsewhere in the province. As these figures indicate, most of the resident travel is generated within the region. The other major component is derived from lower mainland tourists (42%).

Natural resource based tourism accounts for 27% of resident travel to northwestern B.C. For instance, Visitors '89 showed that Outdoor/adventure vacations accounted for 18% of the trip types to the region. Touring vacations accounted for 7% and resort vacations 2%.

3.2 NON-RESIDENT TRAVEL PATTERNS

In 1989, 452,00 visitors from outside B.C. spent at least one night in the North by Northwest Region and generated revenues of $96 million. Over half of these visitors came from the United States (53%), while 29% were from the rest of Canada and 18% were from overseas.

Compared to the provincial average, this region attracts substantially more numbers of Americans (+11%), and international travellers (+8%) but considerably fewer Canadians from other provinces (-19%). The higher level of American interest reflects the fact that many are enroute to Alaska. The interest from overseas markets (especially Germans) is due to the region's wilderness/natural environment appeal.

The leading trip purpose for non-resident visitors is touring (43%). The second most important trip purpose is outdoors/wilderness/adventure trips (14%). When resort vacations (2%) are also considered, 59% of the North by Northwest region's non-resident travel industry is seen to have a direct reliance upon the tourism natural resource base.

According to Visitor '89, non-resident travellers spend $49.54 per person per day. This figure reveals that they spend 10% less than the provincial average of $54.90 which therefore generates fewer spin-off benefits to the regional economy.

4.0 RESOURCE BASED TOURISM PRODUCTS

As discussed earlier, tourism in northwestern British Columbia is especially resource dependent. This regional natural resource reliance is the result of both the touring and outdoors adventure products playing a far larger role in the northwest than elsewhere in the province.

4.1 TOURISM SECTOR DESCRIPTIONS

The three major product sectors that make up natural resource based tourism in the northwest (touring, outdoors/adventure and resort) are discussed below.

Touring

For the purposes of this study the touring sector incorporates both land based and marine based touring.

The Northwest B.C. **land touring** product has been developed and marketed since the construction of the highway in the early 1970s. Although diminished in importance for B.C. as a whole, land based touring in Northwestern B.C. should hold up better than elsewhere on account of its location enroute to Alaska and the Inside Passage. Visitors involved in touring through the northwest spend twice as long there as do their counterparts travelling in other regions of the province: (NW: 22.5 nights; B.C. average: 12.0 nights).

One area where growth in touring is possible involves the fast expanding overseas market. Overseas travel to Canada increased by 63% from 1980-89. With only 5% of the RV use currently associated with this market, there may be room for significant growth.

Marine touring includes large cruise ships, small cruise ships and cruise ferries. Regardless of size, all marine tour products have a strong natural resource component.

In 1990, the **large ship cruise** industry carried approximately 270,00 passengers on the Inside Passage run to Alaska. Despite such a large tourist flow this sector contributes minimally to the economy of the region due to a lack of docking facilities. Modifying this present pattern of operation would involve creating dock facilities or anchorages in locations such as Skidegate and Bella Bella as well as developing shore-based attractions capable of handling large numbers of tourists. This option, however, is not immediately achievable because the Inside Passage cruise ship product is predominantly oriented to the American market and focuses on Alaska as its destination.

These problems can be alleviated by the **small ship cruise** product which would focus on shorter distance, regional cruising. Such ships would be ideally suited to the fiord environment of the North Coast.

As well, a plan to initiate **cruise-ferry** service on the north coast by 1993 is proposed. Besides its ability to carry vehicles, and, therefore being able to link up with on-shore tourism operations, this product would incorporate many of the services and decor found on cruise ships.

Outdoor/Adventure Tourism

Outdoor/adventure travel is a rapidly growing component of the B.C. tourism economy currently generating an estimated $200 million in direct revenues (Wilderness Tourism Council). For the purposes of this study, outdoor/adventure tourism is classified as guide outfitters, fishing lodges or resorts, and adventure activities. Summary information on each sector is presented below.

Guide Outfitting: In 1988, 65 guide outfitting businesses (25% of provincial total) operated in the northwestern region of B.C. generating direct revenues of $5.6 million.

The industry focuses on hunting - which generates 84% of direct revenues - but also provides freshwater sport fishing, wildlife viewing and other related activities.

As Table 2 shows, the hunting market in the northwest attracts visitors from the U.S (81%), Canada (4%) and overseas (especially Germany - 7%, and the rest of Europe - 7%). In the non-hunting market, the same visitors account for 66%, 17%, 6%, and 6% respectively. This market includes interest in fishing (57%), backpacking (40%), trail riding (17%), and wildlife viewing (13%).

TABLE 2: NORTHWEST GUIDE OUTFITTING INDUSTRY MARKETS

	Hunting/Non-Hunt. Markets (%)	Hunting Only Markets (%)
British Columbia	9	2
Alberta	7	1
Rest of Canada	1	1
Total Canada	**17**	**4**
Pacific Northwest	18	22
California	11	9
Mid States	17	25
East U.S.	20	25
Total U.S.	**66**	**81**
Germany	6	7
Rest of Europe	6	7
Australia/New Zealand	3	0
Other	2	1
Total Overseas	**17**	**15**

Source: Guide Outfitters of B.C.: Opportunity Analysis, p. 4-1

Fishing Lodges and Resorts: In 1988, there were 44 sports fishing operations in the northwest representing 17% of the overall B.C. industry. As indicated in Table 3, they generated gross direct revenues of $7.2 million and providing 37,400 client-nights of business.

Table 3: PROFILE OF NORTHWEST FISHING INDUSTRY
(Salt & Fresh)

Number of Operations	44
Revenues ($ millions)	7.2
Average Revenue/Operation	$164,000
# of Clients	14,608
Average Client Nights/Operation	850
# of Client Nights	37,400
$ per Client Night	$193

Source: Fishing Lodges and Resorts in B.C. Exhibit 3-13

The fish lodge/camps industry is divided into the saltwater (8 operations) and freshwater components (36 operations). The saltwater operations, while fewer in number, generate substantially larger revenues.

The origin of the sports fishing clientele in primarily western Canadian and American, with saltwater operations attracting more of the latter.

Adventure Tourism: According to a study by the Outdoor Recreation Council of B.C. (ORC), the 396 operators that comprised the B.C. adventure tourism industry in 1986 generated $56 million in direct revenues.

Although adventure tourism is still in its infancy, a wide range of products are presently offered such as trail riding, backpacking, mountaineering, heli-hiking, rafting, canoeing, etc. Given the resource attributes of the region there is substantial room for growth. According to Tourism Canada, growth in the adventure tourism market is expected to be brisk as Table 4 shows.

Table 4: ADVENTURE TRAVEL GROWTH FORECASTS FOR B.C.

Heli-ski	14%	Cross-country/Ski Tour	27%
Backpacking	29%	Trail Riding	21%
Nature Viewing	13%	SCUBA	9%
Rafting	20%	Canoe	18%
Sailing Tours	21%	Boat Tours	24%

Source: Tourism Canada, Adventure Tourism in Western Canada, p.12

This growth potential is characteristic of a young industry. To realize its potential the need to develop professional marketing programs to reach distance markets if crucial. The North by Northwest Tourist Association is already undertaking co-operative ventures with industry.

Adventure tourism operations are extremely dependant upon a quality resource base since it is so much of the product they offer.

It is especially important that the top calibre features of the region be protected, such as the trophy steelhead run of the Babine, the outstanding wilderness rafting experience of the Tatshenshini, the grizzly populations of the Khutzeymateen, and more. Such premium locations provide exceptional marketing images and play a crucial role in attracting tourists to the region.

Resorts

The resort sector of the tourism economy includes ski resorts, golf resorts and family resorts. There are only a few smaller regional scale resorts in the northwest, i.e., Mt. Layton Hotsprings and Hudson Bay Mountain. Northwestern B.C. is disadvantaged to develop major destination resort products due to its remoteness, cooler climate and inadequate transportation network. For these reasons, resort development in the northwest will likely remain a minor feature of the regional tourism industry.

5.0 TOURISM RESOURCE INVENTORY METHODOLOGY

A key part of this study was the development of a rigorous means of inventorying the tourism resource. Such a tourism resource inventory must be usable for the following applications: identification of the tourism resource to determine quality and extent of the land/water base that it is capable of supporting, integrated resource planning, tourism development siting, and tourism resource management.

To be credible and useful, the inventory must:

- be methodologically consistent;
- be based on accepted data sources;
- use quantified factor definitions to enable rational comparisons between sites and products; and
- be standardized; inventory ratings should remain standard regardless of the region it is applied to.

5.1 CLASSIFICATION OF NATURAL RESOURCE-BASED TOURISM PRODUCT

A hierarchical classification system for natural resource based tourism activities has been developed based on product sectors, product groupings and products.

Product sectors are based on the standard sectors used by Tourism B.C. These sectors are: resorts, touring, cruise and outdoor/adventure.

Because of the wide range of activities which are associated with the outdoors/adventure sector, further subdivision into products groupings and products is necessary.

A **product grouping** encompasses a "family" of similar outdoor/adventure **products** based of similarities amongst the various activities. Table 5 is a list of outdoor/adventure product groupings and their respective products.

Table 5: OUTDOOR/ADVENTURE SEGMENTS AND PRODUCTS

Grouping	Product	Tourism Zone
land adventure	- bike touring	- front
	- mountain biking	- mid/front/back
	- trail riding	- mid/back
	- backpacking	- back
	- heli-hiking	- mid
river adventure	- rafting	- front/mid/back
	- canoeing	- mid/back
	- river kayaking	- front/mid
lake adventure	- sail/motor cruise	- front/mid
	- houseboat	- front/mid
marine adventure	- sail/motor cruise	- front/mid/back
	- sea kayaking	- front/mid/back
	- scuba diving	- front/mid
winter adventure	- heli-skiing	- mid
	- snowmobiling	- mid
	- x-country skiing	- front
	- cat-skiing	- mid
	- ski-touring	- back
	- dog-sledding	- mid/back
fish & wildlife	- guided hunting	- mid/back
	- wildlife viewing	- front/mid/back
	- guided fishing	- mid/front/back

5.2 TOURISM LOCATION FACTORS: Defining Product Requirements

Each tourism product has a distinctive set of geographical "factors" which determines its present and potential spatial distribution. These can be categorized into biophysical factors, human factors and composite factors.

Biophysical Factors

The three essential biophysical factors (landforms, climate and vegetation) define the intricate texture of the natural environment and can be further subdivided to enable very precise requirements of individual tourism products. For example, a

viable heli-ski operation requires mountains (landform), sub-alpine and forest cover (vegetation) and at least 1 meter of snow over a 4 month season (climate).

Biophysical factors cannot be changed; they are givens. Therefore if a certain site lacks an essential biophysical factor, it will never have the capability to support certain tourism products.

Human Factors

Human factors that affect tourism product location include settlements, access, land status and spatial requirements. These human factors are also subdivided into categories and subcategories to enable precise definition of the infrastructure requirements of individual tourism products.

Unlike biophysical factors, *human factors can change, thereby affecting the locational viability of tourism operations.*

Composite (or Natural Resource) Factors

Composite factors are an amalgam of natural environment and human usage patterns. The composite factors used in the inventory process include wildlife, fish, recreation, visual and cultural heritage resources.

While natural resources have definite biophysical requirements and therefore are locationally governed by nature, *human management practices can enhance or degrade the composite factor values.*

Categories/Sub-categories

Since the categories and sub-categories chosen for the inventory will organize the data collection, and establish its effectiveness, careful selection was imperative.

For example, many adventure products require specific terrain slope gradients. Selection of the slope subcategories must correspond with actual tourism product requirements or the data will be meaningless. Research with the skiing industry shows that 70% slope is a key breakpoint between skiable and overly steep terrain. Organizing slope data into "under 80%" and "over 80%" subcategories would miss this crucial point and be of no value.

The categories and subcategories were also integrated with existing "theme" mapping on climate, biogeoclimatic (vegetation) zones, land status and recreation capability.

For every factor, each element was categorized and further sub-categorized. For example, in order to inventory landforms, three elements were used: land features,

slope and vertical. Each of these elements was categorized. For instance, land features was categorized into: mountains, hills, valleys, plains, lakes and rivers. Again, each category, such as mountains, was sub-categorized into: high, moderate and low. Table 6 lists the various categories/sub-categories and their definitions.

Factor Significance

The significance of particular location factors used to define individual tourism products varies. They can be either:

a) essential: the factor is an absolute product requirement (e.g > 1 m snow depth over 4 months is an essential requirement for downhill skiing).

b) quality modifier: the factor is a relative product requirement (desirable but not essential). Using a two step scale, (2) representing a high quality product attribute and (1) moderate quality (e.g. a wildlife viewing business located in CLI High Capability Rating has a quality level of (2), and CLI Moderate Capability has a quality level of (1).

c) constraint: the factor constrains tourism product (e.g. presence of a mountain goat winter range on a particular site constraints or precludes heli-skiing).

d) not applicable: the factor is not relevant to a particular tourism product (e.g. snow depth is not an applicable factor to sail charter operations).

5.3 TOURISM PRODUCT SUMMARIES

Product summaries for each product in the Northwest were developed to provide a framework upon which the product-by-product mapping for this Study was based. Twenty-six were developed; for the purposes of this summary, 11 are included in the appendix.

5.4 CAPABILITY OF INVENTORY RATING

Another level of mapped information - besides identification of geographic areas suitable to particular products - is required to identify the relative quality or capability of different sites. Some different means by which such a capability rating might be accomplished are that it be:

1) linked to the ability of sites to attract visitors from distant markets. By this approach, locations of international significance would receive a top rating. At the other end of the scale, sites with no capability would get the lowest rating.

Table 6 TOURISM PRODUCT LOCATION FACTORS

Theme Map Element	Category	Sub-category	Definition
1. BIOPHYSICAL FACTORS			
LANDFORMS	**Land Features**		
	mountains	high	- 2,700 m+ altitude
		moderate	- 1,500 - 2,700 m altitude
		low	- 600 - 1,500 m altitude
	hills		- 0 - 600 m altitude
	valleys		- confined, lowland level/gentle: *.5 - 16 km wide; <20% slope
	plains		- extensive flat terrain: >16 km. in width; <20% slope
	lakes	large	- area >10 km2+
		small	- area <10 km2+
		chains	- 3 or more linked lakes
		tarns	- alpine/subalpine lakes
	rivers	flatwater	- grade 1/2
		whitewater	- grade 3/4
		unrunable	- grade 5+
	Slope		
	gentle		- 0-20%
	moderate		- 20-40%
	steep		- 40-70%
	extreme		- over 70%
	terrain breaks		- discontinuous with cliffs
	Vertical		
	minimal		- 0 - 75m
	low		- 75 - 150m
	moderately-low		- 150 - 300m
	moderately-high		- 300 - 600m
	high		- 600 - 750m
	very high		- 750 - 1500(+)m
CLIMATE	**Climate Zones**		
	maritime		- Ministry of Forests
	continental		- biogeoclimatic (BCG) definitions
	Precipitation		
	very wet		- > 250 cm/yr
	wet		- 150-250 cm/year

Theme Map Element	Category	Sub-category	Definition
	moist		- 50 - 150 cm/year
	dry		- < 50 cm/year
	Temperature		
	very hot		- July mean temp: >20 C+
	hot		- July mean temp: 16-20 C
	warm		- July mean temp: 14-16 C
	cool		- July mean temp: <14 C
	cold		- July mean: <14 C; Jan mean: <-10
	Snow		
	a) Depth		
	inadequate		- < 1 metre depth for 4 months
	minimum		- 1-2 metre depth for 4 months
	moderate		- 2-3 metre depth for 4 months
	deep		- over 3 metre depth for 4 months
	b) Powder Type		
	wet		- maritime climate zone
	dry		- continental climate zone
	c) Avalanche Hazard		
	acceptable		- depends on slope/weather
	unacceptable		
	Visibility		
	good		- > 66% flying days;dry zone
	moderate		- 33-66% flying days;wet/moist
	poor		- < 33% flying days;very wet zone
VEGETATION	glacier		- glacier on NTS maps
	alpine		- Alpine Tundra BCG zone
	sub-alpine		- high altitude forest/meadow "parkland" ESSF(p), SWB(p), MM(p)BCG zones
	dry forest		- Interior Douglas Fir BCG zone
	grass/forest		- Ponderosa Pine/Bunch Grass BCGs
	general forest		- other BCG zones
2. HUMAN FACTORS			
LAND STATUS	communities	large	- >100,000 population
		medium	- 20 - 100,000 "
		small	- <20,000
	resorts		- destination resorts
	private land		

Theme Map	Element	Category	Sub-category	Definition
		Crown land		
		Indian Reserves		
		recreational tenures		
		parks; recreation areas		
		TSA; TFL borders		
		Wildlife Management Areas		
		Spatial Requirements (hectares)		
		5-20		
		20-40		
		40-100		
		100-500		
		500-1,000		
		1,000-5,000		
		5,000-10,000		
		10,000		
		# of km		
		other:		
ACCESS	Air			
		airports: jet		- jet capable airports
		-max drive to jet airport (hrs)	1	
			2	
			3.	
			5.	
			5+.	
		other airports		- small plane airports, strips, float plane base
		max fixed wing flight time from jet airport:	30 min.	
			1 hr.	
			2 hr.	
		heli-bases		- helicopter bases
		max flight time	15 min.	
			30 min.	
			60 min.	
	Ground			
		railways		
		highways		
		other paved roads		

Table 6 TOURISM PRODUCT LOCATION FACTORS (cont'd)

Theme Map Element	Category	Sub-category	Definition
	max drive time to large community		
		1 hr.	
		3 hr.	
		5 hr.	
	resource roads		
		main	- gravel forest main roads
			secondary /other gravel/4x4 roads
	trails	horse	- horse & foot trails
		foot	- foot trails
		ski	- ski trails
		snowmobile	- snowmobile trails
Marine	harbours		- large ship capable ports
	marinas		- small boat marinas
	anchorages		- havens 5m - 25 m. depth

3. COMPOSITE (NATURAL RESOURCE) FACTORS

FISH AND WILDLIFE

Wildlife Cap.	high	- Can. Land Inventory class 1&2
	moderate	- Can. Land Inventory class 3&4
	low	- Can. Land Inventory class 5&6
Wildlife Viewing		- wildlife viewing sites identified by Wildlife Branch
Fish Cap.	high	- Can. Land Inventory class 1&2
	moderate	- Can. Land Inventory class 3&4
	low	- Can. Land Inventory class 5&6

RECREATION VISUAL & CULTURAL

Recreation Cap.	high	- Can. Land Inventory class 1&2; MoF very high, high
	moderate	- Can. Land Inventory class 3&4; MoF moderate
	low	- Can. Land Inventory class 5&6; MoF low
Visual	pristine	- MoF "Preservation" - no logging
	intact	- MoF "Retention" - logging alters < 6% of landscape unit

Theme Map Element	Category	Sub-category	Definition
		partially intact	- MoF "Partial Retention" - logging alters 6-15% of landscape unit
		altered	- MoF "Modification/Maximum Modification/Excessive Modification" logging alters >15% of landscape
	Cultural		
		heritage sites archeologic sites	- heritage sites inventory as available for public use
TOURISM ZONES			
		urban	- areas within municipalities,etc.
		frontcountry	- settled rural land: private land; agricultural land; highway corridors; destination ski resorts; "Rural" ROS zones
		backcountry	- "Primitive", "Semi-primitive non-motorized" ROS zones
		midcountry	- land not included in other categories - "Resource roaded", "Semi-primitive roaded" ROS zones

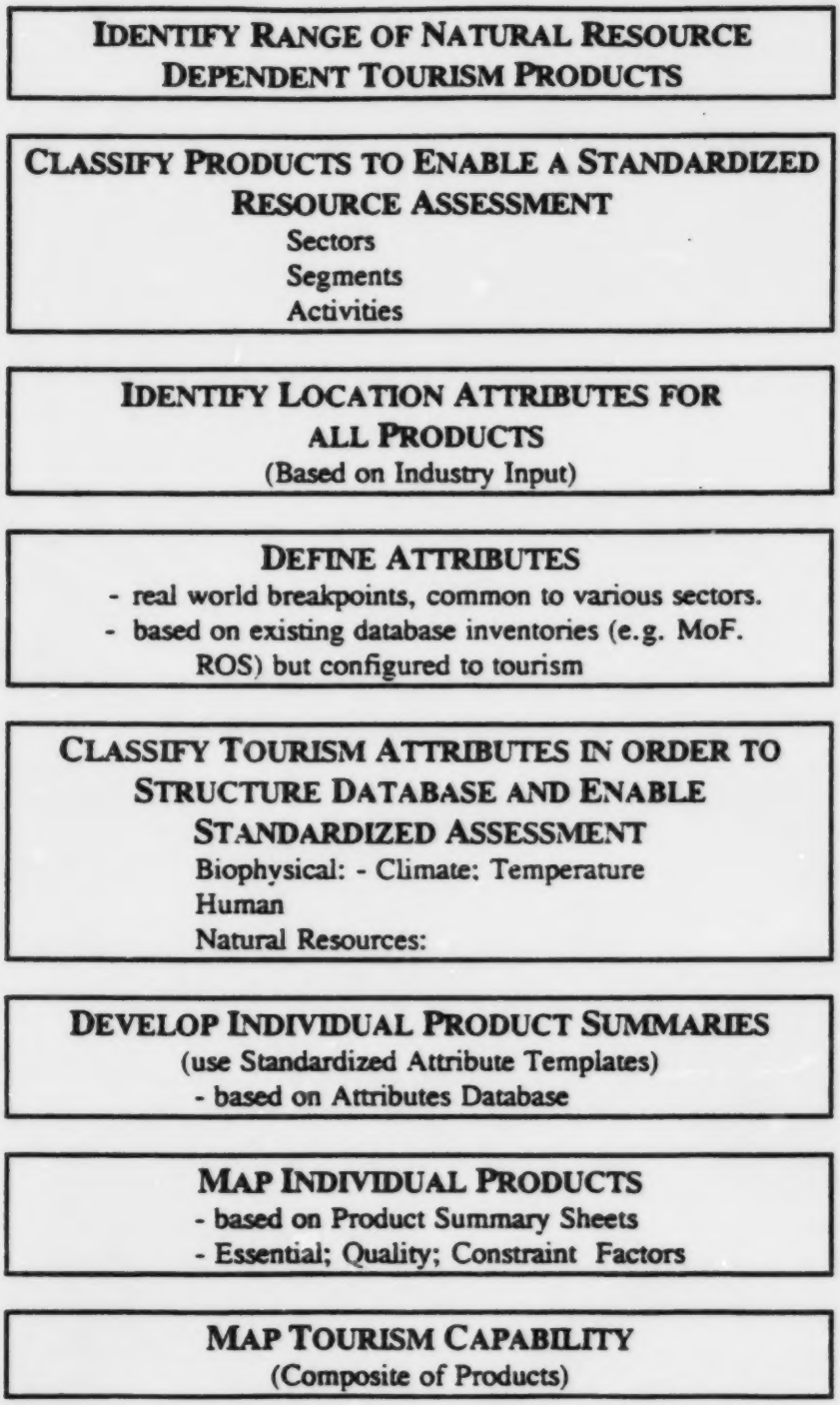
2) based on constraints and preference factors. Under this approach a site with minimal constraint and maximum preference factors would rank highest. By contrast sites associated with minimal preference and maximum constraint factors would receive the lowest capability.

3) based on the ability fo a site to support multiple products. Under this system, a site able to support several products would rate higher than another which was only able to support one.

The method utilized in the Smithers STRM demonstration project is a combination of options 2 and 3.

Figure 1 summarizes the overall tourism resource inventory process.

Figure 1. TOURISM RESOURCE INVENTORY PROCESS


IDENTIFY RANGE OF NATURAL RESOURCE DEPENDENT TOURISM PRODUCTS
CLASSIFY PRODUCTS TO ENABLE A STANDARDIZED RESOURCE ASSESSMENT
Sectors
Segments
Activities
IDENTIFY LOCATION ATTRIBUTES FOR ALL PRODUCTS
(Based on Industry Input)
DEFINE ATTRIBUTES
- real world breakpoints, common to various sectors.
- based on existing database inventories (e.g. MoF. ROS) but configured to tourism
CLASSIFY TOURISM ATTRIBUTES IN ORDER TO STRUCTURE DATABASE AND ENABLE STANDARDIZED ASSESSMENT
Biophysical: - Climate: Temperature
Human
Natural Resources:
DEVELOP INDIVIDUAL PRODUCT SUMMARIES
(use Standardized Attribute Templates)
- based on Attributes Database
MAP INDIVIDUAL PRODUCTS
- based on Product Summary Sheets
- Essential; Quality; Constraint Factors
MAP TOURISM CAPABILITY
(Composite of Products)

6.0 STRM MAPPING DEMONSTRATION PROJECT

To test the foregoing methodology, the location factors that define the tourism products were compiled and mapped for the Smithers STRM area on a set of mylar overlay theme maps (see Study Area Map 2). As previously mentioned, these maps are available through the Research and Information Management Branch, B.C. Ministry of Development, Trade and Tourism in Victoria. The factors mapped on these overlays were as follows:

1) Biophysical	- altitude (i.e. 1:250,000 NTS base map) - slope (i.e.20-40%) - vegetation/climate zones (i.e.alpine)
2) Human	- land status (i.e. Indian reserves) - access (i.e. highways)
3) Natural Resource	- fish and wildlife (i.e. high capacity zones) - recreation/visual (i.e. high capability) - tourism zones (i.e. midcountry)

Once complete, the theme maps could then be used to identify the tourism resource for the STRM area on a product by product basis.

6.1 PRODUCT BY PRODUCT ANALYSIS

Product by product tourism resource mapping was undertaken for: heli-skiing, snow-cat skiing, snowmobiling, ski-touring, guided hunting, wildlife viewing, guided fishing, backpacking, rafting, downhill skiing and automobile touring.

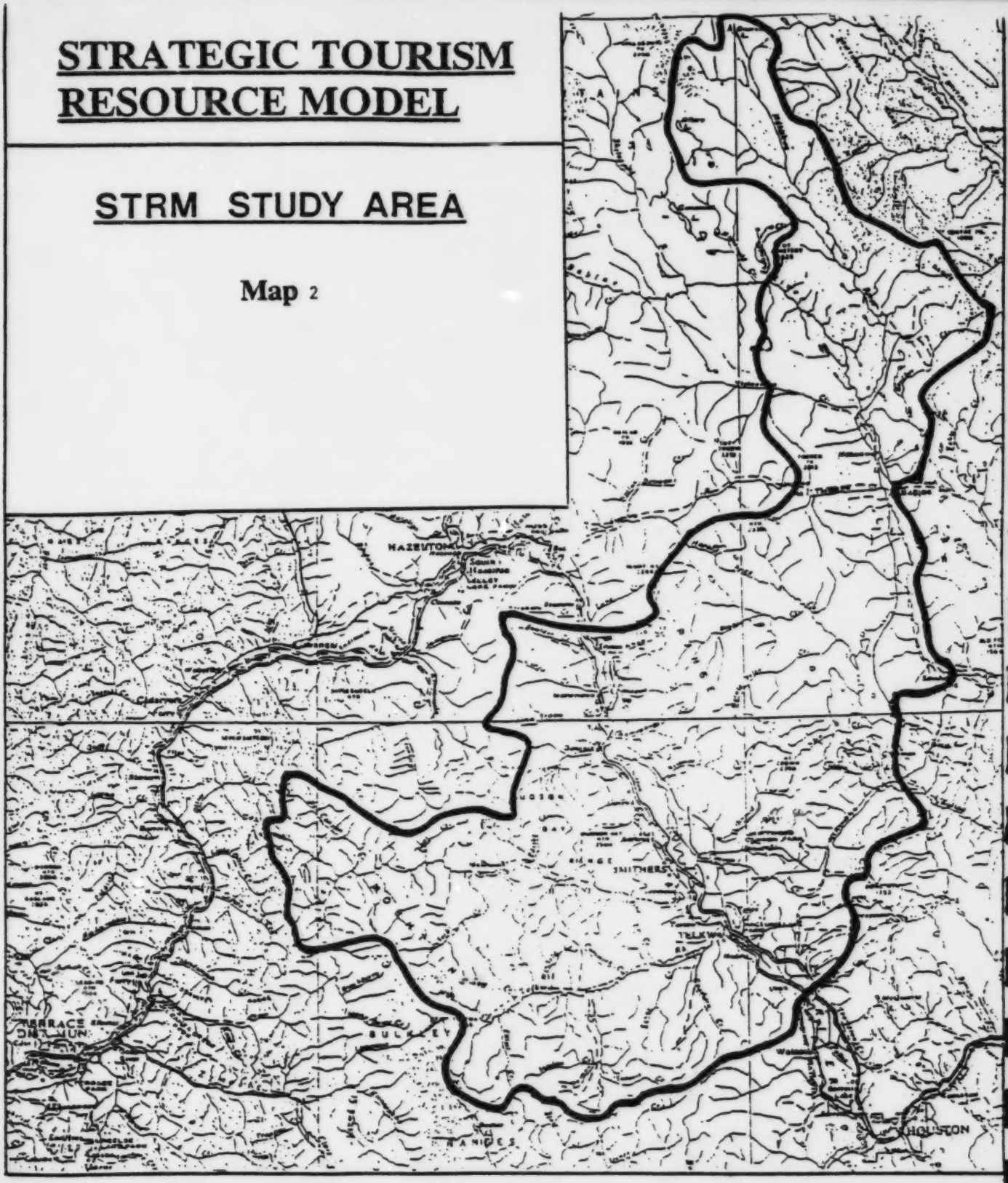
For each activity a two step mapping procedure - as illustrated in Figure 2 - was followed based on the data compiled in the Product Summary sheets (see Appendix):

1) the Essential Location Factors were mapped to determine the maximum geographic range within which a product could be viable.

STRATEGIC TOURISM RESOURCE MODEL

STRM STUDY AREA

Map 2

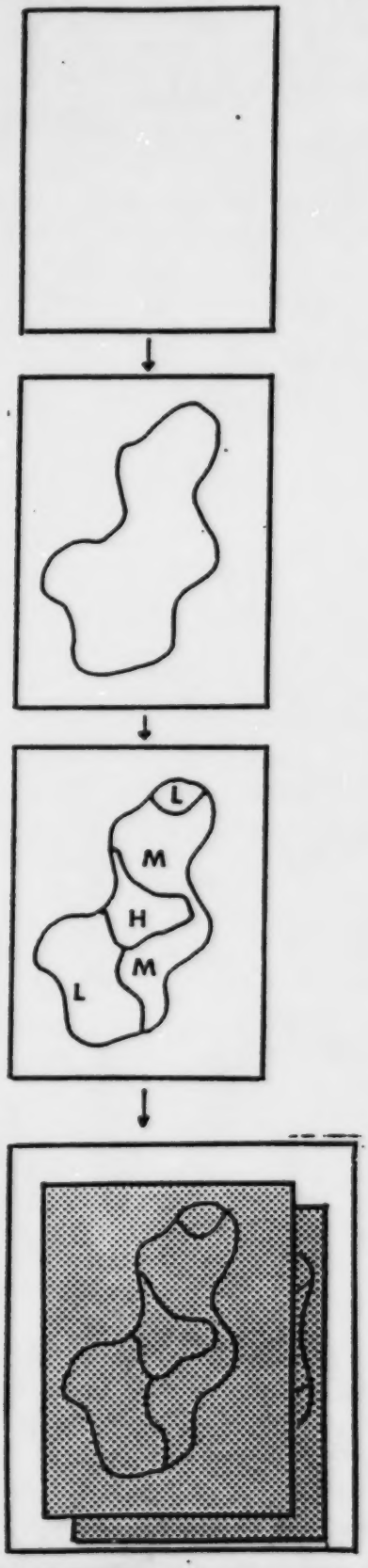


STUDY AREA

VIABLE RANGE FOR INDIVIDUAL PRODUCT
(e.g. Heli-Skiing)
Determined by Essential Factors

CAPABILITY FOR INDIVIDUAL PRODUCT
(High, Moderate, Low)
Determined by Quality Factors

OVERALL TOURISM RESOURCE CAPABILITY
Based on Multiple Product Diversity and
Composite of Individual Product Capabilities



2) the Quality Modifier Factors were then overlaid to identify zones of relative product quality within the viable range.

A summary of the essential and quality factors used for each product is incorporated in the main report. The following three examples are used here.

1. **Heli-skiing**

Essential (all needed)		- mountains - slope 40-70% - vertical rise > 750m - 1 m + snow - flight visibility > 33% of total days - alpine/subalpine/glacier - helicopter access under 15 minutes - no high wildlife constraints
Quality (all needed for high rating)	**High**	- flight visibility 66% or better - < 8 min. heli-flight access - no rec'n/wildlife constraint
(1 or more determines quality)	**Moderate**	- > 8 min. heli-flight access - mod. recreation constraints
(1 or more determines quality	**Low**	- isolated useable terrain blocks - > 8 min. heli-flights access - mod. wildlife constraints - high recreation constraints

2. **Wildlife Viewing**

Essential	- high capability wildlife - wildlife viewing sites of distinctive species - pristine/intact viewscapes

Quality	**High**	- high capability recreation - high diversity - backcountry - pristine viewscapes
	Moderate	- mod. capability recreation - mod. diversity - intact/partial intact viewscapes
	Low	- low recreation capability - low diversity - altered viewscapes

3. **Guided Fishing**

Essential		- prime fishing river with watershed
Quality	**High**	- trophy fishery - backcountry - pristine & quality viewscape - high capability recreation - high capability wildlife - wildlife viewing site - high diversity
	Moderate	- very productive fishery - mod. wildlife capability - mod. recreation capability - mod. diversity - mid or frontcountry - intact/partially intact viewscapes
	Low	- productive fishery - mid or frontcountry - low diversity - altered viewscapes

6.2 RESULTS OF STRM TOURISM PRODUCT BY PRODUCT MAPPING

The complete results of the product by product mapping for the Smithers STRM area is included in the main report. An analysis of the heli-skiing, wildlife viewing and guided fishing products are discussed here.

Heli-Skiing: Suitable terrain is limited. Good locations do occur, however, problems such as wind scouring and overly steep terrain render them non-viable.

The only possible heli-skiing prospects is for a small day-use operation based out of the airport using Hudson Bay Mountain, McDonell Ridge and suitable sites in the Telkwa Mountains. This would be a marginal operation given the dispersed and limited skiable terrain and less than ideal weather conditions. Being day-oriented it would be at a disadvantage to attract skiers from beyond the region.

Wildlife Viewing: Wildlife viewing sites in the STRM, while limited in number, are of high or exceptional quality. The most important site is on the Babine River where a large population of grizzly bears come down to feed on fish. As well, the chance to view an extremely large sockeye salmon run and associated eagles is also outstanding here. Wildlife viewing on the Babine River can be developed by diversifying either existing fishing lodge or rafting operations.

Backcountry viewing opportunities are also exceptional for goats and woodland caribou in the Babine and Telkwa Mountains. Such opportunities could be a strong focus for carefully managed backpacking operations.

A high quality frontcountry viewing site occurs at Moricetown where returning salmon can be watched jumping the falls. The native fishery active here enhances this site. However its value could be enhanced by the creation of an interpretive centre.

Guided Fishing: Guided fishing focuses on the major rivers in the Smithers area and also on Babine Lake. All of these sites are already important tourism locations. The potential for creating new operations is governed by the size and productivity of the fishery resource. Already, for example, fishing entry restrictions are being placed on the Babine river to maintain its resource quality. Furthermore, while enhancement might enable some increase in catch levels, such gains could be offset by a decrease in habitat quality resulting from the actions of other industry sectors (notably forestry).

Still, demand for the high quality fishing experience found in the Smithers area will increase. Therefore, the opportunity to increase tourism values will result more from the pricing up of existing product rather than the creation of new operations.

6.3 TOURISM CAPABILITY MAPPING AND SYNOPSIS

While product by product mapping gives information on site quality and geographic distribution of individual activities, it does not provide a composite overview of the tourism resource. The method chosen must give relative information on both site quality (for a variety of combined activities) and site diversity (to support a number of products).

In the Smithers STRM study each product for a site was scored for quality (based on the criteria laid out in section 6.1): **high =2, moderate = 1.** Then the scores for each product were added together to render an overall tourism capability value for that location. For example, a site in the Babine Mountains with the ability to support high quality backpacking (**score of 2**), high quality ski-touring (**2**), moderate quality wildlife viewing (**1**) and moderate hunting (**1**) would have an overall tourism capability value of **6**.

Tourism capability values for STRM ranged from 1 - 7 and these were consolidated into the following classes:

TOURISM CAPABILITY CLASSES

Class	Value
Very High	6-7
High	4-5
Moderate	2-3
Low	1

The overall tourism resource patterns for the Smithers STRM area can be summarized as follows:

- Very High Capability is indicated for the Babine River corridor (trophy fishing, wildlife viewing, rafting, hunting), much of the Babine Mountains (backpacking, wildlife viewing, ski-touring, snowmobiling, hunting), the Telkwa Mountains (wildlife viewing, hunting, backpacking) and parts of Hudson Bay Mountain (downhill skiing, heli-skiing, cat-skiing).

- High Capability is indicated for the northern portion of the Babine Mountains Recreation Area (ski-touring, backpacking, wildlife viewing), McDonell Ridge (snowmobiling, cat skiing), the west lobe of Hudson Bay Mountain (heli-skiing, cat-skiing) and the Bulkley River near Moricetown (automobile touring, wildlife viewing, fishing, rafting).

- Moderate Capability is indicated for Babine Lake (fishing), most of the Highway 16 corridor (automobile touring), most of the Bulkley River

(fishing), the McDonell Lake area (fishing, hunting, snowmobiling), the Telkwa Pass (snowmobiling, hunting) and the southwestern Telkwa Mountains (heli-skiing, backpacking).

- Low Capability is indicated for the Nilkitkwa area, (hunting), Suskwa Pass (snowmobiling), and rural roads in the Bulkley Valley (automobile touring).

6.4 METHODOLOGY EVALUATION

Upon completion of the STRM mapping process, the methodology was evaluated by Steering Committee resource member to determine its predictive accuracy and effectiveness. It performed well although a couple of refinements were offered for future use:

1) Wind scour significantly affects the capability of certain potential skiing sites. Therefore, in future analysis, wind direction and severity will be added to the attributes list.

2) Diversity assessment of sites must recognize that some combinations of activities may not be mutually compatible.

This compatibility issue notwithstanding, as far as the methodology is concerned, the capability of a site to support a diversity of activities is important when identifying its cumulative tourism resource significance. How various activities then can be integrated becomes a planning/management issue.

APPENDIX 1

TOURISM PRODUCT SUMMARIES

Tourism Product Location Factors

HELI-SKIING

Sector: Outdoor/Adventure
Tourism Zone: Mid
Grouping: Winter

Focus: Activity

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
.1 land: mountains - moderate (e)
.2 marine:
.3 slope: 40-70% (e), terrain breaks a constraint
.4 vertical: 750-1500(+)m (e)

1.2 Climate:
.1 zones: continental (1), maritime (2)
.2 snow: depth: 1-2m (e)
powder: dry (1), wet (2)
avalanche risk: acceptable (e)
.3 visibility >66% flying days; dry zone (1), 33-66% flying days; wet/moist zone (2); >33% (e)

1.3 Vegetation: subalpine/alpine (e), glacier (1)

2.0 HUMAN FACTORS:

2.1 Settlement: heli-lodge, <20,000 population or destination resort (e)
.2 status: Crown/recreation lease (e)
.3 space requirements: 1500-2500 km2 [week]/500 km2 [day] (e)

2.2 Access:
air: max 5 hrs drive from regional airport (e), max 15 min heli flight to base (e); <8 min heli (1); >8<15 min. flight (2)
ground: resource road access to lodge (e)
marine:

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: capability:
viewing sites:

3.2 Fish:

3.3 Recreation, Visual & Cultural:
.1 recreation capabilty: moderate constraints (2)
.2 visual quality: intact/partial (1), altered (2)
.3 cultural features:

Tourism Product Location Factors

SNOWCAT-SKIING

Sector: Outdoor/Adventure **Focus:** Activity
Tourism Zone: Mid
Grouping: Winter

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
- .1 **land:** mountains - moderate (e)
- .2 **marine:**
- .3 **slope:** 40-70% (e), terrain breaks are constraint
- .4 **vertical:** 300-600m

1.2 Climate:
- .1 **zones:** continental (1), maritime (2)
- .2 **snow:** **depth:** >1 m (e)
  powder:
  avalanche risk: acceptable (e)
- .3 **visibility**

1.3 Vegetation: sub-alpine/alpine (e)

2.0 HUMAN FACTORS:

2.1 Settlement: <20,000 population
- .2 **status:** Crown, recreation lease (e)
- .3 **space requirements:** 3000 ha (e), 40 runs [weekly]/20 runs [daily] (e)

2.2 Access:
air: max 5 hrs drive from regional airport (e)
ground: road access to base lodge and subalpine or max 3 hrs drive from large community (e)
marine:

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: **capability:**
viewing sites:

3.2 Fish:

3.3 Recreation, Visual & Cultural:
- .1 **recreation capabilty:**
- .2 **visual quality:** intact (1), altered (2)
- .3 **cultural features:**

Tourism Product Location Factors

SNOWMOBILING

Sector: Outdoor/Adventure **Focus:** Activity
Tourism Zone: Mid
Grouping: Winter

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
- .1 **land:** mountains (e) - moderate (1),- low (2), lakes (1)
- .2 **marine:**
- .3 **slope:** 20-40% (1), 0-20% (2), terrain breaks a constraint (c)
- .4 **vertical:** 150-600m (1), 75-150m (2)

1.2 Climate:
- .1 **zones:** continental (1), maritime (2)
- .2 **snow:** **depth:** >1 m (e)
  powder: dry (1), wet (2)
  avalanche risk: acceptable (e)
- .3 **visibility**

1.3 Vegetation: general forest/sub-alpine/alpine (1), glacier (2)

2.0 HUMAN FACTORS:

2.1 Settlement: <20,000 population
- .2 **status:** Crown
- .3 **space requirements:** 150 km of trail (e)

2.2 Access:
air:
ground: trails/resource roads (e), max 5 hrs drive from market (e)
marine:

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: **capability:**
viewing sites:

3.2 Fish:

3.3 Recreation, Visual & Cultural:
- .1 **recreation capabilty:**
- .2 **visual quality:** intact (1), altered (2)
- .3 **cultural features:**

Tourism Product Location Factors

SKI-TOURING

Outdoor/Adventure

Focus: Activity
Tourism Zone: Back
Grouping: Winter

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
- .1 land: mountains - moderate (e), tarns (1)
- .2 marine:
- .3 slope: 40-70% [to 60%] (1), 20-40% (2)
- .4 vertical: 150-300m (1), 75-150m (2)

1.2 Climate:
- .1 zones: continental (1), maritime (2)
- .2 snow: depth: >1m (e)
  powder: dry (1), wet (2)
  avalanche risk: acceptable (e)
- .3 visibility

1.3 Vegetation: sub-alpine (e), alpine/general forest (2)

2.0 HUMAN FACTORS:

2.1 Settlement:
- .2 status: Crown
- .3 space requirements: 5000 ha (e), 8-16 km trail/day between cabins

2.2 Access:
- air: max 3 hr drive from regional airport (e), max 15 min heli flight (e)
- ground: or max 1 hr snow cat access to base if ground access (e)
- marine:

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: capability:
viewing sites:

3.2 Fish:

3.3 Recreation, Visual & Cultural:
- .1 recreation capabilty: high (1), moderate (2)
- .2 visual quality: intact (e)
- .3 cultural features:

GUIDED HUNTING

Sector: Outdoor/Adventure **Focus:** Activity
Tourism Zone: Mid, Back
Grouping: Fish & Wildlife

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
.1 land: mountains - moderate (1), mountains-low/hills/valleys/plains (2)
.2 marine:
.3 slope: 0-20%/20-40% (1), 40-70% (2)
.4 vertical: 0-75m/75-150m (1), 150-600m (2)

1.2 Climate:
.1 zones: continental (1), maritime (2)
.2 snow: depth:
powder:
avalanche risk:
.3 visibility

1.3 Vegetation: all zones except glacier, pasture/hayland within 300 km of base camp for overwintering stock

2.0 HUMAN FACTORS:

2.1 Settlement:
.2 status: Crown, recreation license/territory (e)
.3 space requirements: ?

2.2 Access:
air: 2 hour fixed wing flight max from regional airport
ground: road access to base camp (e), trails-horse (e)
marine:

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: capability:
viewing sites:

3.2 Fish: high/moderate (1)

3.3 Recreation, Visual & Cultural:
.1 recreation capabilty:
.2 visual quality: intact (1) altered (2)
.3 cultural features:

Tourism Product Location Factors

WILDLIFE VIEWING

Sector: Outdoor/Adventure Focus: Activity
Tourism Zone: Front, Mid, Back
Grouping: Fish & Wildlife

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
.1 land: all landscapes, valleys (1)
.2 marine: all marine-scapes, mouth/estuary (1)
.3 slope: 0-20%, 20-40%, 40-70%
.4 vertical:

1.2 Climate:
.1 zones: continental (1), maritime (2)
.2 snow: depth: <1 m (1)
powder:
avalanche risk:
.3 visibility

1.3 Vegetation: all zones except glacier focusses on winter range

2.0 HUMAN FACTORS:

2.1 Settlement:
.2 status: Crown
.3 space requirements: varies by site/species

2.2 Access:
air: max 2 hrs fixed wing flight from regional airport [backcountry]
ground: highway and resource road access [front/midcountry] (e)
marine: max 1 hr boat access frontcountry/max 3 hr midcountry (e)

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: capability:
viewing sites:

3.2 Fish:

3.3 Recreation, Visual & Cultural:
.1 recreation capabilty:
.2 visual quality: intact (e)
.3 cultural features:

GUIDED FISHING

Sector: Outdoor/Adventure **Focus:** Activity
Tourism Zone: Mid, Front, Back
Grouping: Fish & Wildlife

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
- .1 **land:** lakes (e), rivers - grade 1/2 (e)
- .2 **marine:** all features
- .3 **slope:**
- .4 **vertical:**

1.2 Climate:
- .1 **zones:** both zones
- .2 **snow:** **depth:**
  powder:
  avalanche risk:
- .3 **visibility**

1.3 Vegetation: all zones except glacier/alpine

2.0 HUMAN FACTORS:

2.1 Settlement: <20,000 population, fishing resorts (e)
- .2 **status:** Crown, private, recreation lease (e)
- .3 **space requirements:** 5-20 ha

2.2 Access:
- **air:** max 2 hr fixed wing flight/3 hr drive from regional airport (e)
- **ground:** road access to lodge if not fly-in (e)
- **marine:** anchorage (e), marina (1)

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: **capability:**
viewing sites:

3.2 Fish: high/moderate (e), high (1), moderate (2)

3.3 Recreation, Visual & Cultural:
- .1 **recreation capabilty:** high/moderate (1)
- .2 **visual quality:** intact (1), altered (2)
- .3 **cultural features:**

BACKPACKING

Sector: Outdoor/Adventure **Focus:** Activity
Tourism Zone: Back
Grouping: Land

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
- .1 **land:** mountains - moderate (e), mountains - high/tarns (1), mountains - low (2)
- .2 **marine:** beach (1)
- .3 **slope:** 20-40% (1), 40-70% (2), 0-20% (2)
- .4 **vertical:** 150-600m (1), 75-150m (2)

1.2 Climate:
- .1 **zones:** continental (1), maritime (2)
- .2 **snow:** **depth:**
  powder:
  avalanche risk:
- .3 **visibility**

1.3 Vegetation: sub-alpine (e), alpine (1), general forest (2)

2.0 HUMAN FACTORS:

2.1 Settlement:
- .2 **status:** Crown
- .3 **space requirements:** >5000 ha (e)

2.2 Access:
air: within 4 hrs drive of regional airport (e), or 1 hr fixed wing flight from airport (e)
ground: resource road to trail head
marine:

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: **capability:**
viewing sites:

3.2 Fish: high/moderate (1)

3.3 Recreation, Visual & Cultural:
- .1 **recreation capabilty:** high/moderate (1)
- .2 **visual quality:** intact (e)
- .3 **cultural features:** present (1)

Tourism Product Location Factors

RAFTING

Sector: Outdoor/Adventure **Focus:** Activity
Tourism Zone: Front, Mid, Back
Grouping: River

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
.1 **land:** rivers - grade 3/4 (e)
.2 **marine:**
.3 **slope:**
.4 **vertical:**

1.2 Climate:
.1 **zones:** continental (1), maritime (2)
.2 **snow:** **depth:**
powder:
avalanche risk:
.3 **visibility**

1.3 Vegetation: dry forest/open forest/grass/subalpine /alpine), general forest (2)

2.0 HUMAN FACTORS:

2.1 Settlement:
.2 **status:** Crown, recreational licence (e)
.3 **space requirements:** 24-40 km/d (e)

2.2 Access:
air: max 1 hr fixed wing flight time from regional airport (e), or max 2 hr drive from airport (e)
ground: max. 5 hr drive from large community (e), road access put-in/take-out (e)
marine:

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: **capability:**
viewing sites:

3.2 Fish: high (1), moderate (2)

3.3 Recreation, Visual & Cultural:
.1 **recreation capabilty:**
.2 **visual quality:** intact (e)
.3 **cultural features:** present (1)

DOWNHILL SKI RESORT

Sector: Resort **Focus:** Facility
Tourism Zone: Front
Grouping:

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
- .1 **land:** mountains - moderate (e)
- .2 **marine:**
- .3 **slope:** 0-20%/20-40%/40-70% (e)
- .4 **vertical:**

1.2 Climate:
- .1 **zones:** continental (1), maritime (2)
- .2 **snow:** **depth:** >1m (e)
  powder: dry (1), wet (2)
  avalanche risk: acceptable
- .3 **visibility** >66% flying days; dry zone/33-66% flying days; wet/moist zone (e)

1.3 Vegetation: sub-alpine/general forest/alpine

2.0 HUMAN FACTORS:

2.1 Settlement: <20,000->100,000 population, resorts (e)
- .2 **status:** private/Crown with lease (e)
- .3 **space requirements:** 250 - 500 ha; 20-100 runs (e)

2.2 Access:
- **air:** max 3 hr drive of regional airport (e), max 3 hr drive of international airport
- **ground:** max 3 hr drive of large community (e), max 2 hr drive of large community (1)
- **marine:**

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: **capability:**
viewing sites:

3.2 Fish:

3.3 Recreation, Visual & Cultural:
- .1 **recreation capabilty:**
- .2 **visual quality:** intact (1), altered (2)
- .3 **cultural features:** present (1)

AUTOMOBILE TOURING

Sector: Touring **Focus:** Transportation
Tourism Zone: Front
Grouping:

1.0 BIOPHYSICAL FACTORS:

1.1 Features:
- .1 **land:** all landscapes, mountains/lakes/ rivers (1)
- .2 **marine:**
- .3 **slope:** 0-20%, 20-40%, 40-70%
- .4 **vertical:**

1.2 Climate:
- .1 **zones:** both zones
- .2 **snow:** **depth:**
  powder:
  avalanche risk:
- .3 **visibility**

1.3 Vegetation: open forest/grass/sub-alpine/alpine (1), general forest/dry forest (2)

2.0 HUMAN FACTORS:

2.1 Settlement: <20,000-100,000 population, resorts (e)
- .2 **status:** Crown/private
- .3 **space requirements:** 100 - 500 km/day

2.2 Access:
air:
ground: highways (e)
marine:

3.0 NATURAL RESOURCE FACTORS:

3.1 Wildlife: **capability:**
viewing sites:

3.2 Fish:

3.3 Recreation, Visual & Cultural:
- .1 **recreation capability:** high (1), moderate (2)
- .2 **visual quality:** intact (e), nat. import. (1), prov. import (2)
- .3 **cultural features:** present (1)